AMENDMENTS TO THE SPECIFICATION

Please amend the title of the invention on page 1, line 2 as follows:

PICTURE CODING METHOD FOR CODING A PROGRESSIVE PICTURE SIGNAL

Please amend the paragraph on page 2, line 15 to page 3, line 2 as follows:

Here, MPEG (Moving Picture Experts Group) is an international standard on compression of moving picture signals, and MPEG-1 is a standard for compressing television signal information approximately into one hundredth of the original signal so that moving picture signals can be transmitted at a rate of 1.5 Mbps. Furthermore, since a transmission speed within the scope of the MPEG-1 standard is limited primarily to about 1.5 Mbps, MPEG-2, which was standardized with a view to satisfying requirements for further improved picture quality, allows moving picture signals to be transmitted at a rate of 2 ~ 15Mbps. Moreover, MPEG-4 was standardized by the working group (ISO/IEC JTC1/SC29/WG11) which was engaged in the standardization of MPEG-1 and MPEG-2. MPEG-4 provides a higher compression ratio than that of MPEG-1 and MPEG-2 and allows object-based coding, decoding and manipulation of picture data, which are new functionalities required in this age of multimedia. At first, an effort was being made to establish a standard on a method of coding picture data at a row bit rate, but the scope of MPEG-4 has been extended as a more general coding standard that handles interlaced pictures as well as coding at a high bit rate.

Please amend the paragraph on page 3, line 26 to page 4, line 15 as follows:

Fig.2 is a block diagram showing an example of an existing picture coding apparatus for coding progressive pictures. In the case of reusing the content of an interlaced picture signal, such interlaced picture signal is converted, in advance, into progressive pictures outside the picture coding apparatus, and then inputted to the picture coding apparatus as a progressive picture signal 101. The existing picture coding apparatus shown in Fig.2 is comprised of: (i) a sampling converter ~~102a~~ 102b that converts the progressive picture signal 101 inputted at a first predetermined sampling rate (e.g. 30 frames/s) into a progressive picture ~~s ignal~~ signal 801 to be sampled at a second predetermined sampling rate (e.g. 15 frames/s) by re-sampling such progressive picture signal 101 at a constant interval; and (ii) a picture encoder 104 that codes the progressive picture signal 801 to be sampled at the second predetermined sampling rate so as to output coded picture data. In this existing picture coding apparatus, the sampling converter 102a samples the progressive picture signal 101 at constant frame intervals so as to convert it into the progressive picture signal 801 to be sampled at the second predetermined sampling rate, and the picture encoder 104 codes such progressive picture signal 801 for which sampling conversion has been performed, and outputs the resulting signal as coded picture data 802.

Please amend the paragraph on page 4, line 24 to page 5, line 15 as follows:

In order to be broadcasted as television content, a telecine picture part is converted from a cinema signal to be outputted at a rate of 24 frames/s into an NTSC signal to be outputted at a rate of 30 frames/s (to be referred to as "telecine conversion" hereinafter). Fig.3 illustrates an example of converting a cinema signal into a telecine picture signal (interlace) and the telecine

picture signal into a progressive picture signal. Circled numbers in Fig.3 indicate the frame numbers of frames in a cinema signal which are original pictures. Through telecine conversion, telecine pictures as shown in Fig.3 are generated from the original cinema signal by repeatedly converting fields corresponding to frames in such original cinema signal in a rhythm of "3, 2, 3, and 2". When one of the two fields (e.g. top field) in each of the frames in such a telecine picture signal is converted into a progressive picture, frames with the same content are generated cyclically as shown in Fig.3. When progressive pictures generated in the above manner are reproduced at a rate of 30 frames/s, there occurs a strong fluctuation in the frame display speed from a visual standpoint, as compared to that of the telecine pictures, which results in unnatural motions. Moreover, when the above progressive pictures are sampled every two frames and the resultant is reproduced at a rate of 15 frames/s, there occurs a far stronger fluctuation in the frame display speed from a visual standpoint, resulting in increasingly unnatural motions in coded picture data.

Please amend the paragraph beginning on page 5, line 16 as follows:

Therefore, when the existing picture coding apparatus shown in Fig.2 performs coding on such a progressive picture signal, coded picture data with unnatural motions is generated.

Please amend the paragraph beginning on page 5, line 26 as follows:

However, since such an existing coding method is intended for coding an input picture signal as an interlaced picture signal, ~~meaning that~~ there is a problem that this method is not applicable to the coding of a progressive picture signal.

Please amend the paragraph on page 5, line 30 to page 6, line 30 as follows:

Furthermore, since the existing picture coding apparatus shown in Fig.2 always performs coding ~~always~~ at the same sampling rate, unnatural motions are generated as a result of performing coding, as a progressive picture signal, on an input picture signal that constitutes a mixture of a part which was originally a cinema signal and a part which was originally an NTSC signal.

Please amend the paragraph beginning on page 8, line 12 as follows:

Note that the present invention can be realized not only as a picture coding method, but also as a picture coding apparatus that includes, as its units, the characteristic steps included in the above picture coding method, and as a program that causes a computer to execute such steps, as well as coded picture data which is generated using the above picture coding method. And it should be noted that such a program and coded picture data can be distributed via recording media including a CD-ROM and the like, and transmission media including the Internet and the like.

Please amend the paragraph on page 13, line 32 as follows:

Also note that the above-described Δt1 may be 0 ~~second~~ seconds.

Please amend the paragraph beginning on page 14, line 17 as follows:

Also, in the first embodiment, a different sampling rate is used for the progressive picture signal 103 after sampling conversion outputted from the sampling converter 102a depending on whether a part in the input progressive picture signal 101 was originally a cinema signal or an NTSC signal, but this does not pose any significant problem. As shown in Fig.7, ~~w hen~~ when the picture encoder 104 performs coding according to MPEG-4, for example, on the progressive picture signal 103 for which frequency transform has been performed, information indicating a sampling rate is described in a VOP (Video Object Plane) time increment resolution (VOPTIR) within the VOL header included in a VOL (Visual Object Layer). Note that a VOL is included in a VO (Video Object) and a VO is included in a VOS (Visual Object Sequence) which is a sequence of the whole moving pictures.